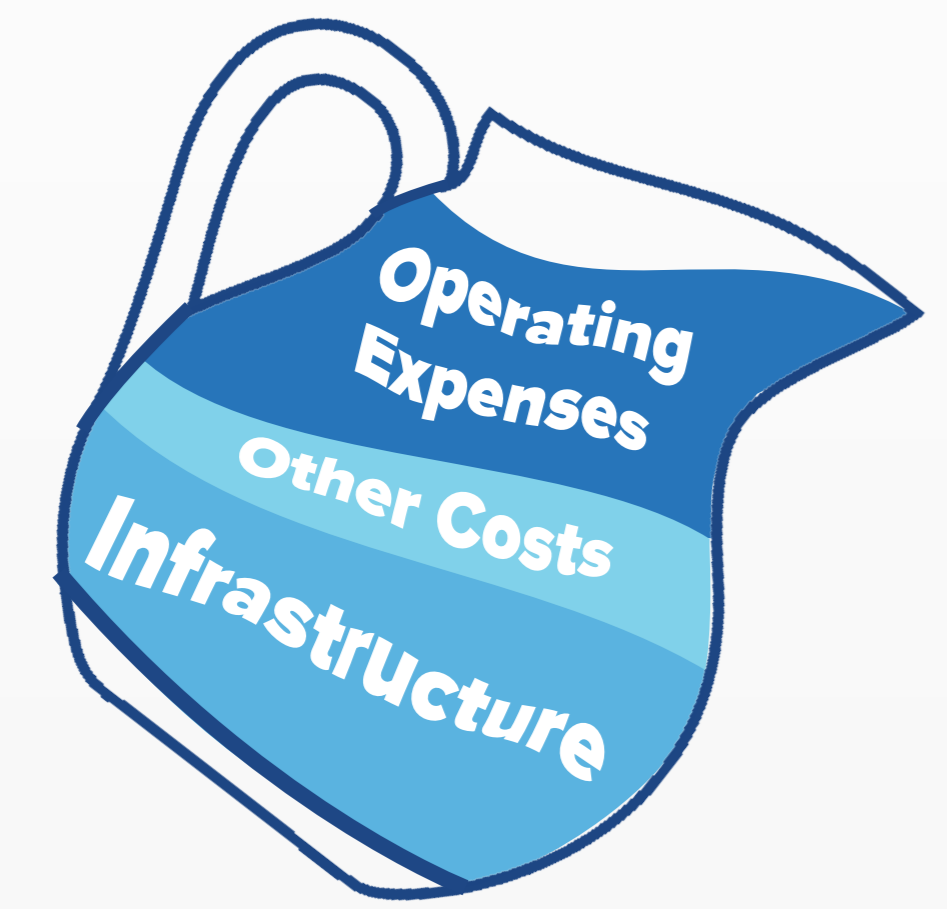


# HOW THE GREAT LAKES WATER AUTHORITY SETS WATER CHARGES



**1** **GLWA creates a water budget.** This budget is capped at a four percent increase (that means it can't increase more than four percent every year).

## GLWA WATER BUDGET

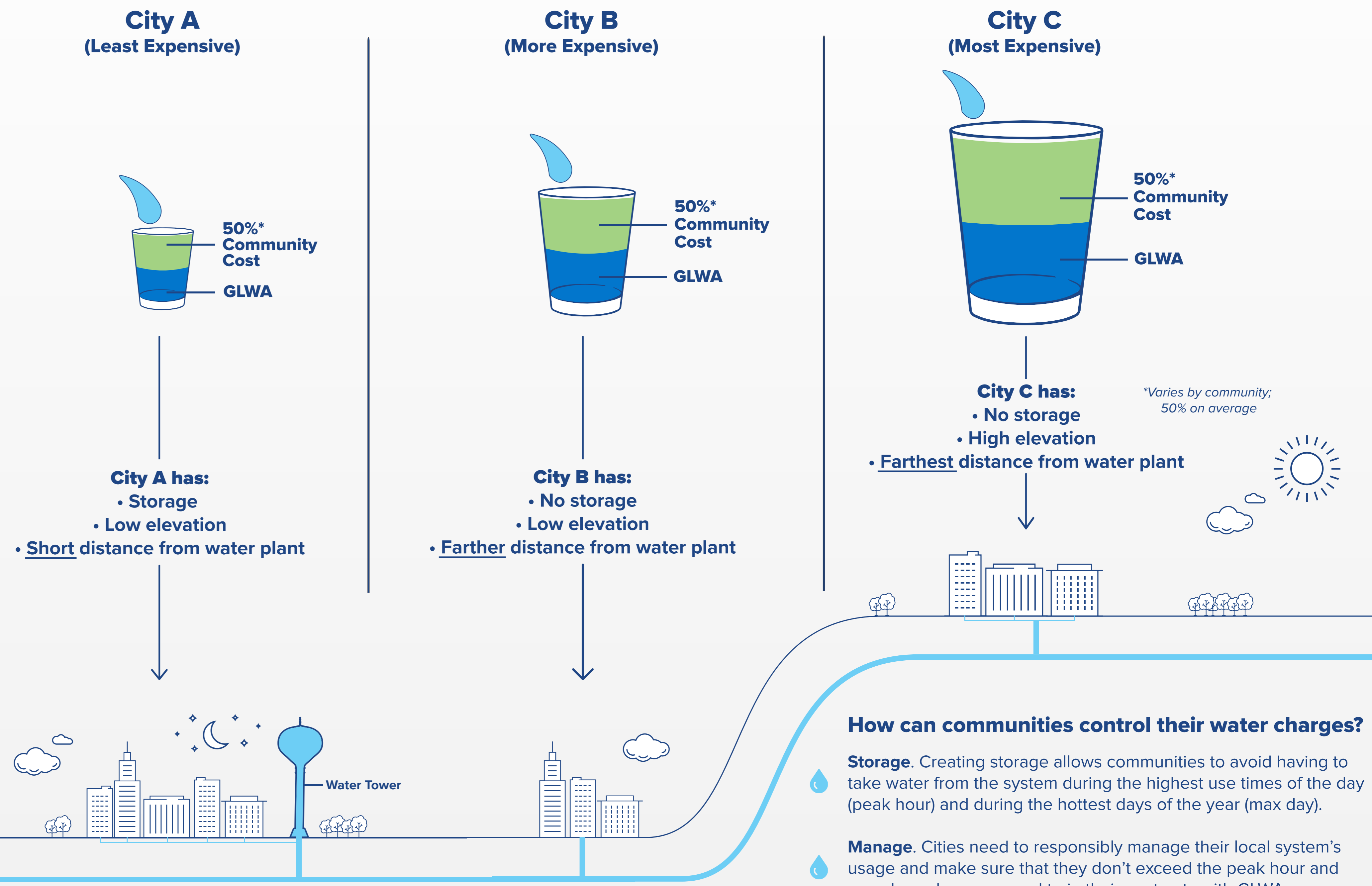
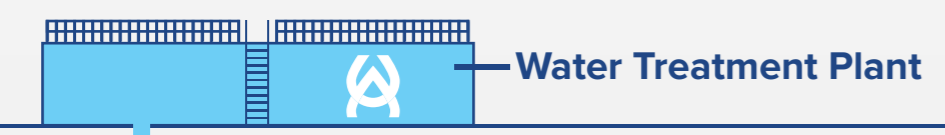


**3** **New charges are given to communities,** and the communities then add their own local operating costs, which are typically a similar amount (approx 50/50). This total then results in the local rates that are billed to individual homeowners.

**2** **The budget is then used to set charges for each community.**

Factors that go into determining charges unique to each community are:

- Usage** patterns (How much water a city takes, particularly on the hottest days and the highest use day of the year)
- Elevation** from the water plant (It's harder to push water up hill)
- Distance** from the water plant (A long way for water to travel)



**⚡** The more electricity that is needed to pump water to a city, the more expensive a city's charge will be. So, the farther and higher elevated a city is, the more energy is needed to pump water to it. There are also more pumps and pipes needed. Usage patterns also affect cost; it takes more effort to serve everyone at once, so if every city is taking water from the GLWA system at the same time, it will cost more. Cities that take their water from GLWA at night and place it into storage enjoy significant savings.

## How can communities control their water charges?

- Storage.** Creating storage allows communities to avoid having to take water from the system during the highest use times of the day (peak hour) and during the hottest days of the year (max day).
- Manage.** Cities need to responsibly manage their local system's usage and make sure that they don't exceed the peak hour and max day volumes agreed to in their contracts with GLWA.
- Conserve.** Through proper local management, each community has an opportunity to reduce how much water it uses from the regional system.

# HOW THE GREAT LAKES WATER AUTHORITY SETS SEWER CHARGES



## GLWA SEWER BUDGET

GLWA creates a sewer budget. Each community's sewer charge is based on the sewer budget and allocated as a "Share," which is determined by the flow it sends to GLWA's Water Resource Recovery Facility (previously known as the Wastewater Treatment Plant). The type of flow and how costly each type of flow is to treat determine a community's charge.

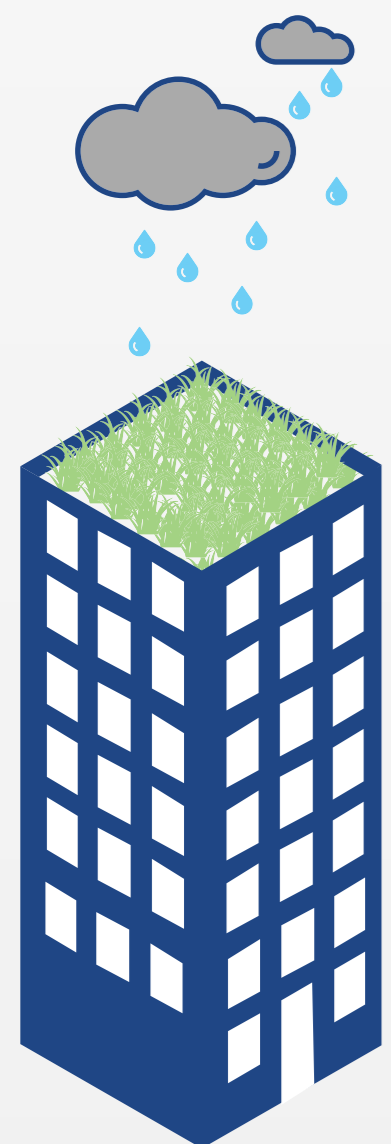
## THREE DIFFERENT TYPES OF FLOWS

Each city's flow is measured through metering and engineering estimates. Combined, these flows make up a city's sewer "Share." Sewer "Shares" are recalculated every three years.



## HOW CAN COMMUNITIES CONTROL THEIR SEWER CHARGES?

If a community can control its flow, it can control its cost.



### Green Infrastructure\*

An example of green infrastructure is a green roof, which soaks up rain water rather than letting it wash off into drains that lead to the Water Resource Recovery Facility. This reduces storm water flow.

\*Green infrastructure is an approach to water management that protects, restores or mimics the natural water cycle.)



### System Maintenance

Regular maintenance, repair and improvements can help communities prevent increased flow from DWII.



### Separate Sewer System

A separate sewer system is more efficient than a combined system. Separate systems reduce a community's costs because storm water is not sent to the Water Resource Recovery Facility for treatment.

SANITARY SEWER

STORM SEWER

### COMBINED SEWER SYSTEM

This system is more expensive for a community because all types of flows are combined, therefore they are all sent to the Water Resource Recovery Facility for treatment.

